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APPLICATION NO. FILING DATE		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BRINKS H	OFER G	ILSON & LIONE	EXAMINER		
P O BOX 10395 CHICAGO, IL 60610			CHANCE, JANET D		
				ART UNIT	PAPER NUMBER
				3626	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	09/559,725	COSTONIS ET AL.					
Office Action Summary	Examiner	Art Unit					
	Janet D. Chance	3626					
The MAILING DATE of this communication appeariod for Reply	ears on the cover sheet with the	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute,  - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	6(a). In no event, however, may a reply be ti within the statutory minimum of thirty (30) da ill apply and will expire SIX (6) MONTHS fron cause the application to become ABANDON	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 28 A	<u>pril 2000</u> .						
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4)⊠ Claim(s) 1-108 is/are pending in the application	n.						
4a) Of the above claim(s) is/are withdraw							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-108</u> is/are rejected.							
7) Claim(s) is/are objected to.	-						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner	•	'					
10)⊠ The drawing(s) filed on <u>28 April 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)					
S Patent and Trademark Office  Office Ac	tion Summary	Part of Paper No. 10-					

# Recent Statutory Changes to 35 U.S.C. § 102(e)

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

### A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

### A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at www.uspto.gov or call the Office of Patent Legal Administration at (703) 305-1622.

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#### **DETAILED ACTION**

### Notice to Applicant

1. This communication is in response to the application filed 28 April 2000. Claims 1-108 are pending.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-3, 5-30, 32-57, 59-84, and 86-108 are rejected under 35 U.S.C. 101 because the claimed invention is directed toward non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts, and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to the statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to

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pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In this case, claim 1 only recites an abstract idea. The recited steps of receiving information, providing responses, determining loss and determining a best practice do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to analyze claim data.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention of a method for claims data analysis produces an optimal best practice of analyzing claim data.

Although the recited process produces a useful, concrete and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claim 1 is deemed to be directed to non-statutory subject matter.

- (B) Similar analysis can be applied to claims 28, 55, and 82. Therfore these claims are rejected as well.
- (C) Claims 2-3, 5-27, 29-30, 32-54, 56-57, 60-81, 83-84, and 87-108 inherit the deficiency through dependency and are rejected as well.

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(D) Note, that the above deficiencies can be easily overcome by <u>expressly stating</u> the use of the technological arts such as a processor, or computer network in the <u>body</u> of the claims.

(E) For purposes of applying art Examiner interprets the claims to employ the technological arts.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5-23, 27-30, 32-50, 54-57, 59-77, 81-84, 86-104, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammond et al. (5,712,984), and further in view of Moore et al. (5,930,759), and further in view of Little et al. (5,359,509).

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(A) As per claim 1, Hammond teaches a method for claims data analysis (Hammond; Figure 4; col. 7, lines 11-20), comprising the steps of:

- a) receiving information associated with a plurality of claims (Hammond; col. 4, lines 13-14);
- b) However, Hammond does not expressly teach the step of providing responses to a set of queries associated with the information. Moore teaches providing responses to a set of queries associated with claim information (Moore, col. 9, lines 44-49. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the step of providing responses to queries of Moore to the claims analysis method of Hammond with the motivation suggested by Moore of reducing delays in claims processing by correcting information or adding missing information (Moore, col. 2, lines 52-57),
- c) determining a loss economic opportunity associated with the processing the plurality of claims (Hammond; col. 6, lines 17-23 and lines 39-43). However, Hammond does not expressly disclose the loss determination based on the responses. Moore teaches responses to queries including fees (Moore; col. 12, lines 22-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the responses to the queries of Moore into the step of determining the loss economic opportunity of Hammond with the motivation suggested by Hammond of ensuring an optimal data set by reducing the number of errors in the data (Hammond; col. 6, lines 2-5) to ensure the data set for claims analysis is as optimal as it can be; and

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d) identifying characteristics that have the greatest effect on claim cost (Hammond; col. 8, lines 60-65). However, Hammond does not expressly disclose the characteristic being a best practice of claim analysis. Little teaches the step of using a plurality of reviews methods (i.e., best practices) created per claim characteristic and used to analyze claims to determine how best to minimize claim cost and thus which review or best practice works best for a particular claim type (Little; col. 17, lines 21-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the best practice review methods of Little to the method of determining effect on claim cost of Hammond with the motivation of lowering administrative costs (Little; col. 1, lines 36).

(B) As per claim 2, Hammond teaches the step of determining the economic impact of claim characteristics (Hammond; col. 8, lines 60-65). However, Hammond does not expressly disclose the characteristic further includes quantifying the economic effect of the characteristic in terms of a reduction of a cost associated with processing the plurality of claims. Little teaches the step of using a plurality of reviews methods (i.e., best practices) to analyze claims to determine how to minimize claim cost based on the characteristics of a claim and thus which review or best practice works best for a particular claim type (Little; col. 17, lines 21-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the best practice review methods of Little to the method of determining effect on claim cost of Hammond with the motivation of lowering administrative costs, and minimizing fraud and unintentional errors (Little; col. 1, lines 36 and lines 39-41).

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- (C) As per claim 3, Hammond teaches receiving information associated with a plurality of claims (Hammond; col. 4, lines 13-14). However, Hammond does not expressly disclose the step of providing as least one query to be completed inn response to the information associated with each of the plurality of claims. Moore teaches the step of providing as least one query to be completed in response to the information associated with each of the plurality of claims (Moore; col. 9, lines 42-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to add Moore's step of providing a query to the claims analysis system of Hammond with the motivation suggested by Moore of reducing delays in claims processing by obtaining information to correct information or fill-in missing information of a claim (Moore; col. 1, lines 52-57).
- (D) As per claim 5, Hammond teaches providing for a query further includes:
- a) the designation of at least one characteristic of each claim in processing the plurality of claims based on listed claim details (Hammond; col. 10, lines 50-55). However, Hammond does not expressly disclose the characteristic being a best practice used in the processing of each of the claims. Little teaches the use of a review method (i.e., best practice) used in the processing of each of the claims. It would have been obvious to one of ordinary skill in the art at the time of the invention to add the best practice review methods of Little to the method of determining effect on claim cost of Hammond with the same motivation as applied to claim 1 and incorporated herein.



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Further, Hammond and Little do not expressly disclose the use of a designation in the query. However, Moore teaches the use of queries that contain specific claim details (Moore; col. 9, lines 42-61 and col. 10, line 49 to col. 11, line 7). It would be obvious to add the designation of the best practice in the queries of Moore to the claims analysis system of Hammond and Little with the motivation suggested by Moore of reducing delays in claims processing (Moore; col. 2, lines 52-57).

- b) Hammond teaches the weighting of various characteristics applied to each claim (Hammond; col. 9, line 25 to col. 10, line 3). However, Hammond does not expressly disclose the characteristic being a best practice used in the processing of each of the claims. Little teaches the use of a review method (i.e., best practice) used in the processing of each of the claims. Further, Little teaches assigning priorities to the review methods (Little; col. 7, lines 31-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to add the best practice review methods with assigned priorities of Little to the method of determining effect on claim cost of Hammond with the same motivation as applied to claim 1 and incorporated herein.
- (E) As per claim 6, Hammond teaches the step of determining a loss economic opportunity further includes:
- a) determining an actual cost for processing each of the plurality of the claims (Hammond; col. 6, lines 17-25);

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b) evaluating the loss economic opportunity as a percentage of an absolute loss economic opportunity divided by the total claims cost (Hammond; col. 15, line 63-65 and col. 6, line 39-43).

- (F) As per claim 7, Hammond teaches the claims analysis method wherein determining an actual cost further includes:
- a) calculating the total claims cost as the sum of the indemnity and allocated loss adjustment expense (Hammond; col. 15, lines 63-65 and col. 6, lines 39-43).
- (G) As per claim 8, Hammond teaches evaluating the loss economic value further includes:
- a) calculating the loss economic opportunity for the plurality of claims by averaging the loss economic opportunity for each of the plurality of claims (Hammond, col. 20, lines 2-67).
- (H) As per claim 9, Hammond teaches the generation of a report indicating the efficiency of the process (Hammond; col. 19, lines 49-64 and col. 10, lines 6-23).
- (I) As per claim 10, Hammond teaches providing responses to a set of queries further includes:

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- a) calculating a number of claims to be reviewed based on applying standard statistical sampling formulae to the plurality of claims (Hammond, col. 8, lines 12-25).
- (J) As per claim 11, Hammond teaches the performance and capabilities of the reviewer having impact on loss calculation and the calculation of loss (Hammond; col. 4, lines 18-22). However, Hammond does not expressly disclose a productivity calculation. It is common to calculate productivity of workers. It would be obvious to one of ordinary skill in the art at the time of the invention to determine the productivity based on number of claims reviewed (i.e., queries responded to) with the motivation of calculating the total internal costs of processing a claim and improving the overall solvency of the insurance carrier (Hammond; col. 2, lines 9-11).
- (K) As per claims 12-13, Hammond teaches the generation of a standard report (Hammond; Figure 11, col. 19, line 50-63). Hammond does not disclose the generation of a custom report. It is common practice to create custom reports. It would be obvious to add the feature of custom reports to the standard report feature of Hammond with the motivation of helping to identify characteristics which are significant in affecting claim cost (Hammond; col. 2, lines 25-26).
- (L) As per claims 14-18, Hammond teaches a claims analysis method as rejected in claim 1. However, Hammond does not expressly disclose providing a standard set of queries in an automobile, liability, accident, property, or workers compensation line of insurance. Moore

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teaches the queries are made up of computer routines (Moore, col. 9, lines 50-55) and the step of providing for a standard set of queries in an automobile (i.e., property), liability, accident, or workers compensation line of insurance (Moore, col. 13, lines 59-61, col. 14, lines 25-26, col. 14, lines 62-64, and col. 10, lines 10-15). It would be obvious to one of ordinary skill in the art at the time of the invention to add the plurality of insurance line sets of queries of Moore to the claims analysis method of Hammond with the motivation of suggested by Moore of providing prompts for additional information that may be needed depending on the response to a question (Moore, col. 13, 38-39, col. 14, lines 54-56).

- (M) As per claims 19-23, the combined teachings of Hammond, Moore, and Little as applied to claim 5 disclose a set of best practices that have statistically shown to have an effect on economic loss for workers compensation insurance (Hammond; col. 8, lines 40-43, col. 9, line 57 to col. 10, line 3) and medical health insurance (Little; col. 1, line 7-8). As workers compensation and health insurance involves personal injury, accident, business property, and business liability insurance, the combined teachings of Hammond, Moore, and Little meet the limitations of these claims.
- (N) As per claim 27, Hammond teaches the claims are insurance claims (Hammond, col. 7, lines 11-14).

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- (O) Apparatus claim 28 differs from claim 1, in that claim 1 contains a method recited as a series of function steps whereas claim 28 contains features recited in a "means plus function" format. As the method of step claim 1 has been shown to be disclosed or obvious by the combined teachings of Hammond, Moore and Little, it is readily apparent that the "means" to accomplish those method steps is obvious in view of the prior art. As such, the limitations recited in claim 28 are rejected for the same reasons given for method claim 1 and incorporated herein.
- (P) Product claim 55 differs from claim 1, in that claim 1 contains a method recited as a series of function steps whereas claim 55 contains features recited as computer instructions that would allow a computer to enact the function steps. As the method of step claim 1 has been shown to be disclosed or obvious by the combined teachings of Hammond, Moore and Little, it is readily apparent that the product containing the computer instructions to accomplish those method steps is obvious in view of the prior art. As such, the limitations recited in claim 55 are rejected for the same reasons given for method claim 1 and incorporated herein.
- (Q) System claim 82 differs from claim 1, in that claim 1 contains a method recited as a series of function steps whereas claim 82 contains features recited in a "means plus function" format. As the method of step claim 1 has been shown to be disclosed or obvious by the combined teachings of Hammond, Moore and Little, it is readily apparent that the "means" to accomplish

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those method steps is obvious in view of the prior art. As such, the limitations recited in claim 82 are rejected for the same reasons given for method claim 1 and incorporated herein.

- (R) Claims 29-30, 32-50, and 54 recite the same limitations as claims 2-3, 5-23, and 27, respectively, and are therefore rejected for the same reasons provided for those claims and incorporated herein.
- (S) Claims 56-57, 59-77, and 81 recite the same limitations as claims 2-3, 5-23, and 27, respectively, and are therefore rejected for the same reasons provided for those claims and incorporated herein.
- (T) Claims 83-84, 86-104, and 108 recite the same limitations as claims 2-3, 5-23, and 27, respectively, and are therefore rejected for the same reasons provided for those claims and incorporated herein.

7. Claims 4, 24-26, 31, 51-53, 58, 78-80, 85, 105-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammond, Moore, and Little as applied to claims 1, 28, 55, and 83 above, and further in view of Fatseas et al. (5,671,409).

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- (A) As per claim 4, the combined teachings of Hammond and Moore teach the claims analysis method of claim 1. However, the combined teachings of Hammond and Moore do not expressly disclose wherein providing responses further includes:
- a) the step of providing the queries in more than one language. Fatseas teaches the providing of queries in more than one language (Fatseas, col. 5, lines 13-42); and
- b) the step of allowing the user to toggle between the queries in different languages (Fatseas; col. 5, lines 13-42).

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the queries in multiple languages and the toggling between the languages of Fatseas to the combined claims analysis method of Hammond and Moore with the motivation of permitting the same system to be used by persons who are functional in English and/or other languages (Fatseas; col. 3, lines 22-23).

(B) As per claim 24-26, the combined teachings of Hammond and Moore teach the claims analysis method of claim 1 and the queries are provided in English (Moore, Figure 12B). However, the combined teachings of Hammond and Moore do not expressly disclose the queries are provided in German or Dutch. Fatseas teaches the provision for queries in other languages, namely, German, Spanish, Vietnamese, Chinese, Polish or Italian (Fatseas; col. 5, lines 13-42). However, Fatseas does not expressly disclose the Dutch language. It would have been obvious

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to one of ordinary skill in the art at the time of the invention to add the other languages of

Fatseas and to add the language of Dutch to the claim systems analysis method of Hammond and

Moore with the same motivation as provided for claim 4 and incorporated herein.

- (C) Claims 31, 58, and 85 recite the same limitations as claim 4, and are therefore, rejected for the same reasons provided for that claim and incorporated herein.
- (D) Claims 51-53, 78-80, and 105-107, recite the same limitations as claims 24-26, respectively, and are therefore, rejected for the same reasons provided for those claims and incorporated herein.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not relied upon art teaches a medical reimbursement system with emphasis on cost effective use of resources (4,667,292), a patient data quality review method that quantifies the extent that a claim correction altered the payment (5,307,262), an article on risk managers that discusses important figures such as average claim cost and allocated loss adjustment expense (LePere "An actuarial viewpoint. (loss comparisons)"), a health plan that analyzed its claims to create a profile of practice patterns, then ranked providers on how closely they followed the best-practices (Haugh, "Extractions: Chop, chop"), the use of data mining to perform claims analysis to encourage providers to achieve best practices (Greene, "Medicine starting to see value in data. (Statistical Data Included)"), and an article about a coalition of

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representatives from HCFA, provider groups and major health plans that developed a list of best practices (Anonymous, "Complying with Medicare's Claims-Processing Requirements").

Any response to this action should be mailed to: 9.

> Commissioner of Patents and Trademarks Washington, D.C. 20231

Or faxed to:

(703) 305-7687 [Official communications] (703) 746-7238 [After Final communications, labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

Any inquiry concerning this communication or earlier communications from the 10. examiner should be directed to Janet D. Chance whose telephone number is (703) 305-5356. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703) 305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7687 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

November 11.

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600